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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/763,781

01/22/2004

Alex L. Liu

PCI011

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25866

7590

08/02/2006

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EXAMINER

WEAVER, SUE A

ART UNIT

PAPER NUMBER

3727

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/763,781

Applicant(s)

LIU, ALEX L.

Examiner

Sue A. Weaver

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11-15, 19-21, 23, 24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-14, 19, 20, 23, 24 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11, 15, 21 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-4, 6-9, 11, 15, 21 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 recites the limitation "said supplemental surface member" in line 2.

There is insufficient antecedent basis for this limitation in the claim. It may be noted that claim 26 is dependent from claim 25 which was canceled.

It isn't clear what applicant means by the expression, a diameter that decreases or remains constant from "outer inner wall substantially cylindrical portion ..." as is now claimed in claim 1. Is applicant now setting for an outer inner wall substantially cylindrical portion? Further more it isn't understood how a section is considered to be tapered if it has a constant diameter as is now claimed with the first and second tapered sections in claim 1.

Claim 11 recites the limitation "said insulative air gap" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The claim for an outer wall comprised of at least a top section and a bottom section in claim 15 appears to be a double inclusion of the top section and bottom section claimed in claim 12

It isn't clear how applicant considers the outer wall to be comprise of a single section as claimed in claim 21 when is comprised of a top section welded to a bottom

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section as is now claimed in claim 12. It appears that applicant is attempting to combine two different embodiments for which there is no support.

3. Claims 12-14, 19,20, 23, 24 and 27 are allowed while claims 10, 16-18 and 22 have been canceled.

4. Applicant's arguments, see page 8 of the amendment, filed 5/22/06, with respect to the objection to the specification and rejection under 35 USC 112 first paragraph have been fully considered and are persuasive. The objection and rejection of claims 2 and 20 has been withdrawn.

With regard to applicant's query about cross-hatching for Polycarbonate, Allen doesn't claim such material but Mehta et al (5,133,469 does. Applicant is referred to the sectional view in Figure 6 of Mehta et al for proper cross-hatching for polycarbonate which is claimed by Mehta et al

5. Applicant's arguments with respect to claims 1, 11m 15 and 26 have been considered but are moot in view of the new ground(s) of rejection.

6. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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Typed or printed name of person signing this certificate:

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Signature: \_\_\_\_\_

Registration Number: \_\_\_\_\_

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue A. Weaver whose telephone number is (571) 272-4548. The examiner can normally be reached on Tuesday-Friday from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor is Nathan Newhouse. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SW

*Sue A. Weaver*  
**SUE A. WEAVER**  
**PRIMARY EXAMINER**  
**GROUP 8700**